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ABSTRACT

Recently collected evidence shows the likely existence of twelve South American Indian languages with object-initial word order. This is contrary to what had been generally predicted in the literature on word order typology before 1977. Numerous examples are provided of OVS (Object-Verb-Subject) and OSV (Object-Subject-Verb) word order, primarily from the Carib languages. The constituents of these sentences and their positions are discussed in detail. In addressing the question of where these object-initial languages come from diachronically, it is suggested that a number of the OVS Carib languages represent breakaways from OVS languages of the area which exists today. This word order change is based on the grammaticalization of an older stylistic but frequently used option of subject postposing. The areal clustering of these languages is not due to either the genetic relatedness of the languages concerned or to contact between the languages; the languages discussed fall into five different families, and there is no evidence of contact between them. (PMJ)

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OBJECT INITIAL LANGUAGES

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0. Most languages, and perhaps all, clearly have what can be called a basic order of sentence constituents. This will be the order most typically found in simple declarative transitive clauses where no stylistic or discourse-conditioned permutation is in evidence. The existence of languages having a basic order in transitive clauses in which the direct object NP is initial has been regularly and widely denied in the literature of syntactic typology. For example, Vennemann (1973:27) states:

> Greenberg observes that of the six possible arrangements, (SVO, SOV, VSO, VOS, OSV, and OVS) only three occur as the only or dominant pattern of declarative clauses, viz. those in which S precedes O: VSO, SVO and SOV (universal 1). This is readily explained.

Vennemann's reference is to Greenberg (1963), and slightly misrepresents Greenberg, who in fact said (p. 61):

> Logically there are six possible orders: SVO, SOV, VSO, VOS, OSV and OVS. Of these six, however, only three normally occur as dominant orders. The three which do not occur at all, or at least are excessively rare, are VOS, OSV, and OVS.

Greenberg's qualifications are rather important. What Vennemann (1973) has done is to silently elevate Greenberg's hedged claim into an

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absolute one. Pullum (1977) makes a more explicit attempt to extract a law-like universal from Greenberg's statistical claim. Pullum states (1977:269), after reviewing the available literature on languages for which O-before-S orders had been claimed as basic:

> Four basic word orders, not three, are found: SVO, SOV, VSO and VOS. The other two logically possible orders, OSV and OVS, do not occur at all, contra various allusions in the literature on syntactic typology.

He proceeds to construct a schema for assignment of basic order to sentence constituents in such a way that OSV and OVS cannot be assigned as basic orders at all, and thus are predicted to show up as surface orders only as the result of processes of stylistic permutation in specific discourse contexts.

It now appears that the absolute claims these authors make are false. The purpose of the present paper is to present some facts that have come to our attention recently concerning a number of Amerindian languages which we believe do exhibit object-initial basic orders.[1] The languages we shall discuss belong to South American Indian groups which are known to have suffered more or less catatrophic decline in numbers due to the onslaught of European settlement in the New World over the past five hundred years (see Hemming 1978). Since the historical accident of European colonial expansionism has had such a devastating effect in this case, linguists might be well advised to reduce henceforth the extent of the trust they place in alleged universals of constituent ordering, and should also be sceptical of the linguistic relevance of claims that certain basic orders are rare or 'marked'. The geographically widespread character of the SVO order shared by English, French, Spanish, Portugese, and Dutch, for example, may be more directly relatable to the widespread expansion by speakers of those languages through colonization on every habitable continent of the globe than to anything about the naturalness of SVO order. To reason from the essentially demographic facts of the distribution of languages in the modern world to timeless laws or tendencies of linguistic structure would therefore be very unwise. As Chomsky and Halle (1968:4) remark:

> Certain apparent universals may be the result merely of historical accident. For example, if only inhabitants of Tasmania survive a future war, it might be a property of all then existing languages that pitch is not used to differentiate lexical items. Accidental universals of this sort are of no importance for general linguistics, which attempts rather to characterize the range of possible human languages.

Their mention of Tasmania is, of course, all the more poignant in view of the fact that Tasmania once had an indigenous population, who never encountered Europeans until 1802, but were driven into complete extinction within a few decades thereafter. No study was ever made of the indigenous dialects that survived in Tasmania through 12,000 years of isolation

from mainland Australia, and no universal or typological claims can ever be checked against them. The skewing of the set of attested languages that this has introduced cannot now be assessed, whether with regard to word order or any other feature. And the same is true for the skewing introduced by the wholesale extinctions of peoples and languages brought about by the conquest of South America since 1500.

1. OVS languages.

The list of OVS languages to which we shall devote some discussion here is probably not exhaustive, for we expect further research, particularly on the languages of the northern Amazonian area, to yield more cases. But not all the languages on the list are totally secure cases of OVS. Some show signs of SOV and OVS orders being favoured to an equal or similar extent. Such cases are mentioned here because they exhibit enough signs of OVS being dominant to make it advisable for further investigation to be carried out, and because they are known to be related to clearer cases of OVS languages.[2] We shall discuss Hixkaryana (1.1), Apalaí (1.2), Makushi (1.3), Hianacoto-Umaua (1.4), Arekuna/Taulipang (1.5), Panare (1.6), Bacairí (1.7), and Asuriní (1.8). Of these eight languages, only the first has yet received anything like adequate documentation in print.

1.1 Hixkaryana

Hixkaryana is a member of the Carib language family and is spoken by groups located on the rivers Nhamundá and Mapuera in northern Brazil, about halfway between Guyana's southern border and the Amazon. Today there are about 350 speakers. The group on the Mapuera are often referred to as the Sherew (Shedeu) tribe; those on the Nhamundá are now generally designated Hixkaryana. Both are included in the more general grouping of Carib-speaking tribes usually referred to in the literature as Parukoto-Charuma. The Hixkaryana language is classified by Durbin (1977) as Southern Carib (Southern Guiana).

The first reference to word order in Hixkaryana is a brief one in Derbyshire (1961):

> When goal and actor tagmemes occur in the same sentence, the goal always precedes, and the actor usually follows, the predicate tagmeme.

Derbyshire (1977) is a more explicit and detailed description of word order in the language, being specifically directed toward refuting the claim made by Pullum (1977) for a language universal whereby OVS (as well as OSV) cannot be assigned as the basic order. Both syntactic and statistical evidence is shown to support Derbyshire's own initial reactions as a fluent speaker of the language.

The following examples show the typical order of constituents.

(1) a. kana yanɨmno bɨryekomo
fish he-caught-it boy
The boy caught a fish.

b. kana yanɨmpɨra nahko bɨryekomo
fish not-catching he-was boy
The boy did not catch (any) fish.

c. manhotxowɨ hawana komo
they-danced visitor coll.
The visitors danced.

d. ɨtohra exko Waraka yakoro keknano rohetxe rowya
not-going be Waraka with she-said-it my-wife to-me
"Don't go with Waraka," my wife said to me.

The negative sentence (1b) is one example of the typical copular construction, in which the copular complement (the equivalent of the direct object in a transitive sentence) precedes the copula -exe- 'be', which in turn is followed by the subject. (1c) illustrates the normal order of the nuclear constituents in an intranstive sentence (VS), thus confirming the post-verbal position of subject as the basic one, and at the same time refuting a possible alternative explanation that the direct object in a transitive sentence should be analyzed as the 'syntactic subject', along the lines proposed by some for the absolutive case in ergative languages. Example (1d) reflects the rigid order of the O and V constituents of the quotative sentence, in which the embedded direct speech (equivalent of direct object) always precedes the main verb -ka- 'say'; in ordinary transitive sentences the OV order is not quite so rigid, but still unquestionably typical.

The statistical evidence for OVS as the basic order is that the native texts published in Derbyshire (1965) show twice as many postverbal subjects as sentence-initial subjects (including cases of intransitive clauses, where the commonest order is VS), and show preverbal position for objects to be vastly more frequent than the very occasional occurrences of post-verbal position (VO). Further work[3] has since shown strong confirmation of these claims. We have conducted a count on a large sample of sentences, taken from Derbyshire (1976), a translation from modern English of the New Testament into Hixkaryana, made in close collaboration with native speakers while residing among the tribe between 1959 and 1975 (and published in Brazil before the linguistic issue of word order typology had been brought to Derbyshire's attention). The sample used for the count was basically the entire stock of transitive clauses in the Gospel According to St Matthew, minus any that seemed stylistically inverted in the modern English original and any that were paraphrased as non-transitives in the Hixkaryana version. The percentage of declarative clauses with nominal subject and object that show OVS order is 91%. Assuming only that over large amounts of text a grammatically basic order will tend to be statistically frequent as an occurring surface order (as stylistic preposings and postposings average each other out), this suggests very strongly that OVS is descriptively basic for the language, and that Hixkaryana is comparatively rigid with regard to word order -- about as rigid as English.

The syntactic arguments in Derbyshire (1977) relate to the rules that permit the only significant variant order, SOV. There is an obligatory quesion-word movement rule, which accounts for the fact that all question words occur sentence-initial, whatever grammatical relation they bear in the sentence. Only one other rule is then needed to account for the fronting of the subject; this relates to discourse-conditioning factors pertaining to emphasis, focus, and highlighting of a constituent. Both rules apply to indirect objects and oblique objects (adverbials, locatives, etc.) as well as to subjects. These more peripheral elements normally occur sentence-final, following the subject (OVSI, etc.), but they can be moved to initial position by application of either of the fronting rules. There is, however, a constraint against the fronting of more than one constituent, so that if a subject is fronted there will not also be a fronting of a perpheral element, and vice versa. If SOV were treated as the descriptively basic order, there would be no explanation for the non-occurrence of sentences of the form X-S-O-V where X is some oblique or adverbial constituent.

Discourse-initial sentences, which are generally (but wrongly) regarded as virtually free of contextual influences, follow a similar pattern. Here, the highlighting rule that fronts the subject applies more often than elsewhere, since the subject frequently refers to a newly introduced participant who is important to the discourse that follows. Even so, OVS still tends to be the preferred order. In the 30 published texts in Derbyshire (1965) the facts relating to the initial sentences of the texts are: (i) a subject nominal occurs in 22 of the 30 sentences; and (ii) in 12 of them it is in final position ((O)VS), and in 10 of them it is in initial position (S(O)V).

We feel there is no alternative but to recognize OVS order as descriptively basic for Hixkaryana. For a full description of Hixkaryana syntax, Derbyshire (1979a) may be consulted, and for further discussion of the implications of Hixkaryana for syntactic typology, see Derbyshire (1979b).

1.2 Apalaí (Aparai)

Apalaí is a language of the Carib family, spoken by groups who live on the upper reaches of the Maicuru, Paru, and Jarí rivers, northern tributaries of the Amazon in the state of Pará, Brazil. There are between 150 and 175 speakers. They have in recent years integrated with another Carib-speaking tribe, the Wayana, but the two languages are said to be distinct, with a high degree of bilingualism (S. Koehn, 1974). In Durbin's classification "Wayana-Aparai" appears in Northern Carib (East-West Guiana) (Durbin, 1977).

Our source of information is data supplied by Ed and Sally Koehn. In general, subject and direct object nominals in Apalai discourse are even less frequent than in other Carib languages, anaphoric reference by deletion or person-marking affixes being the norm in most sentences. There is also frequent use of nonfinite verb forms, in what seems to be

basically a copular construction, but with the (finite) copula form often deleted (as in (2d) below; when the copula occurs it is usually sentence-final). The only data we have found with transitive main clauses that contain subject and direct object nominals is in S. Koehn (1974), and it shows a slight preference for the OVS order of constituents (17 examples) over the SOV order (12). The preferred order is seen in:

(2) a. u- tupi akoty-ase aimo
my field cut rec.past boy
The boy cut my field.

b. pake ahtao arimi wo-se pyrou-ke toto
long ago monkey killed arrow with they
Long ago they used to kill monkeys with arrows.

c. aimo nyh- ma- po- no jeny ty- paxi- ry- a
boy sleep trans. caus. imm.past mother her sister poss. by
The mother caused the sister to put the boy to sleep.

d. joromu puhturu ahno- ˜ko mũpo
squash seed eating continuative rat
The rat is eating squash seeds.

In (2d) the verb has a gerundive form and this normally occurs as the complement of a finite form of the copula. The copula is often deleted, as in the example, but when it occurs it is nearly always sentence-final; the subject then occurs either between the gerundive form and the copula, in which case it can still be considered to be in final position(OVS) in an embedded subordinate clause, or in sentence-initial position (S-Comp-Cop).

In transitive clauses where the only nominal that occurs is subject, that subject always precedes the verb (4 examples); the same order (SV) is the most frequent one in intransitive clauses (19 examples, compared with 8 VS).

In subordinate transitive clauses the OVS order is strongly favored (9 examples, against only 2 where the subject is in initial position), and here the subject is marked by the suffix -a. The same suffix marks the intermediate agent (causee) in causative constructions (see (2c)), in which the surface subject is the initiating agent (causer); this subject is normally unmarked, as in other transitive clauses, but there are two examples of causative transitive clauses in which the subject (causer, not causee) is marked by the suffix -a (Koehn's exs. 214a and 215b -- she explains this in terms of underlying semantic role, but, according to her glosses and by comparison with other transitive clauses, the grammatical relation is clearly that of subject of a transitive verb). This marking of subject in subordinate and (some) causative clauses is a restricted form of the ergative marking found in Makushi (1.3) and Arekuna/Taulipang (1.5).

Statistical evidence alone can be misleading, and in this case it is

based on a very small sample. Such as it is, however, it is slightly in favor of OVS as the basic order of constituents for Apalaí.

1.3 Makushi (Makũsi, Makũxi, Makuchi)

The Makushi tribe live in villages which extend from the Rupununi river in Guyana, across the northern part of the Territory of Roraima in Brazil, and into Venezuela. Current estimates of their number are 10,000 (Abbott, 1977) and 16,000 (Hodsdon, 1974). We suspect that these figures may included Arekuna/Taulipang speakers (see 1.5). The Makushi language is classified by Durbin (1977) as Northern Carib (East-West Guiana), along with closely-related Pemong (Arekuna/Taulipang and Akawaio: see 1.5).

There are three sources for our information with respect to the order of sentence constituents: Williams (1932), C. A. Hodson (1974), and Abbott (1977). The two who make explicit statements support a preferred SOV order, but their statements are hedged in such a way as to leave open the possibility that OVS is more basic; the data from all three sources is not conclusive, but it is slightly in favor of OVS, thus contradicting the descriptive statements.

The clearest statement is in Abbott (pp. 235-6):

> A ordem preferido ... é: sujeito, objeto, predicado ... Este sujeito livre pode ocorrer após o predicado. Quando não se dá a forma livre do sujeito, o sujeito é manifestado por um sufixo pronominal no verbo, seguido do marcador de sujeito -ya.
>
> [The preferred order ... is: subject, object, predicate ... This free subject can occur after the predicate. When there is no free subject form, the subject is manifested by a pronominal suffix in the verb, followed by the subject marker -ya.]

According to that statement the postposing of subject appears to be optional and less frequently used, but later, in the discussion on intransitive clauses, there is an implication that it is more normal to place the subject after the verb in a transitive clause:

> A manifestação do sujeito em orações intransitivas de ação difere da das transitivas no fato de ocorrer antes de predicado e sem o marcador de sujeito -ya.
>
> [The manifestation of the subject in action intransitive clauses differs from that in transitive clauses by the fact that it occurs before the predicate and without the subject marker -ya.]

In support of these (and other) statements, there are 33 examples of transitive clauses in the first section of the paper (three repetitions and one copular clause yield the total of 37 examples); 14 have a subject

nominal (free form), of which 8 occur after the verb ((O)VS) and 6 are sentence-initial (S(O)V); when there is an object nominal it always occurs immediately before the verb (no examples are cited here since they do not differ in any significant way from those given below from the other sources).

The statement which Williams makes about constituent order is in the context of what he terms 'incorporation' of subject and object pronominal elements in the verb, so that 'the sentence, complete with subject, object, and verb, can often be written in one word'. He continues (p. 50):

> The order in the sentence of subject, object, and verb is not invariable; when an emphatic subject is expressed it usually stands first in the sentence and is followed by object and verb. When the subject is an incorporated pronoun, the usual order is, object, verb, subject.

This is the only statement we find in Williams on the order of constituents, and it is somewhat incomplete. It relates to ordering under two conditions, i.e. emphasis and incorporation, which would not normally be regarded as of primary importance in determining basic order. In particular, he does not account for the examples he later gives, where a (nonincorporated) subject nominal occurs following the verb, as in (3a), taken from p. 104, which contrasts with the SOV order in (3b), from p. 54:

(3) a. máiŋ ẓ-ai-póŋ-tə-bə Joe-ẓa Osenégu-pə
message sent Joe-SM Osenegu-by
Joe sent the message by Osenegu.

b. John se en-ẓá-ne-ẓá tu-róŋ wə-sá
John self lazy SM bird shoot-aorist
John, the lazy man, killed the bird.

Hodsdon does not make any statement about constituent order, but she supplies numerous examples of transitive clauses, from which the following are taken:

(4) a. yei ya'tî-'pî anna-ya
tree cut dist.past we SM
We cut the tree.

b. u- yun yapi'si-'pî João-ya yei ya'tî-to'pe u- yun ya
my father get dist.past John SM tree cut CAUS. my father SM
John got my father to cut the tree.

c. mîrîrî ye'nen tuna ekaranmapo-'pî uurî-ya
that because water ask dist.past I SM
That's why I asked for water.

d. mîîkîrî-ya vîttî koima-'pî tî- san yarakkîrî
she SM house clean DP her mother with
She cleaned the house with her mother.

e. João-ya yei ya'tî-'pî wa'ka ke
John SM tree cut DP axe with
John cut the tree with the axe.

The first three of the foregoing examples are OVS and the last two are SOV, and this reflects the ratio in all the transitive clauses having a free form subject in Hodsdon's paper: (14 (O)VS and 10 S(O)V. The last three examples all have nonnuclear constituents and their position may be significant in determining basic order of nuclear constituents: in (4c) the nonnuclear constituent occurs sentence-initial and the subject in final position, whereas in (4d) and (4e) the positions are reversed, with the subject in initial position and the nonnuclear constituent occurring sentence-final; if this is the regular pattern it would accord with an hypothesis that OVS is the basic order, that the normal position of nonnuclear constituents is sentence-final, after the subject, and that there is a constraint against fronting more than one constituent in any sentence (this assumes that for purposes of emphasis etc. a constituent is more likely to be moved from its normal position to sentence-initial rather than to sentence-final position; cf. Derbyshire (1977) for such a rule in Hixkaryana). In Hodsdon's data object nominals precede the verb, except in one case where the subject is first person and the object follows the verb (again cf. Derbyshire (1977) for a similar exception in Hixkaryana to the rule that the object precedes the verb).

Makúshi and Arekuna/Taulipang (see 1.5) are unique among the Carib languages for which we have relevant information in having morphological ergative marking in main declarative clauses (there is a trace of it in Apalaí and in Hixkaryana subordinate clauses). What we have assumed to be the subject of a transitive clause (following Abbott and Williams -- Hodsdon uses semantic function labels) is normally marked by the suffix -ya(-za in Williams), which is glossed as SUBJECT MARKER (SM) in the examples cited. Where the subject is overtly expressed only as a suffix in the verb, it is followed by the same marker -ya(-za), occurring now as a verb suffix. (Hodsdon states that the subject marker always occurs with what she calls the agent nominal, but ex. 1 in Abbott's paper seems to be an exception (the only one we have noted); cf. Koch-Grünberg's statement about Taulipang referred to in 1.5). Other ergative features are: the subject in intransitive clauses (see the second quote from Abbott earlier in this section) and the object in transitive clauses are unmarked, and both normally occur immediately preceding the verb; when the subject and object occur as bound affixes in the verb the same linear sequence is maintained, i.e. intransitive subject and transitive object are prefixes, while transitive subject is a suffix (Abbott, pp. 235-6, 242); this rigid order of object-stem-subject in the verb, although not conclusive in itself, would appear to lend support to an OVS basic order hypothesis.

In view of Koch-Grünberg's statement on Taulipang subject nominals

(see 1.5), it is noteworthy that in Makushi there is a similar pattern (but perhaps not quite as strong) of preferring to place a pronoun subject after the verb and a full NP subject in initial position. In Abbott's examples there is only one case of a subject nominal other than a pronoun following the verb, compared with 8 subject pronouns in that position, but in Hodsdon there is an equal number of pronouns and other nominals (7 of each); in clause-initial position, on the other hand, Abbott has 4 examples of each, while Hodsdon has 2 with pronouns and 8 with other nominals. Since unmarked pronouns are less likely to be emphatic than other nominals, this would appear to be further support for the OVS hypothesis outlined earlier in relation to a fronting rule for purpose of emphasis.

The Makushi ordering patterns for clauses other than the simple declarative transitive show some differences from those in Hixkaryana, which we consider to be the clearest case of OVS. Thus, as noted already, in Makushi intransitive clauses the subject precedes the verb (we noted no exceptions at all in the data inspected), whereas in Hixkaryana the preferred order is VS. In Makushi copular clauses the preferred position for the subject is between the complement and the copular verb (Comp-S-Cop) (Abbott p. 246, and this appears to be generally supported by the examples we have seen in all three sources --there are less-used variant orders, but none in which S follows the copula); in Hixkaryana the most frequent orders are Comp-Cop-S (preferred, and equivalent to OVS) and S-Comp-Cop, and it is rare to find the subject occurring between the other two constituents. Makushi quotative sentences are similar to those in Hixkaryana in that they always have a main verb 'say' with an embedded clause direct object (the quoted speech) of that verb, but they differ in that the 'say' verb can either precede or follow (or both) the direct object speech (in Hixkaryana it always follows); where it precedes, the subject precedes that verb, with a resulting SVO order, and where it follows, the subject follows the verb (OVS) (Abbott pp. 251-2, Hodsdon pp. 28-9). The subject does not have the subject-marking suffix in copular clauses (like intransitives), but it does in quotative clauses (like transitives).

In spite of the statements in two of the sources that SOV is the preferred order for Makushi, it appears to us that OVS may be the more basic order. First, insofar as we may take the scattered examples available to us to be a random sample of Makushi sentences, where subject and object nominals occur, the statistical evidence is slightly in favor of OVS. Second, where only clitic pronouns on the verb express subject and object, the order is rigidly OVS. Williams' statement that an emphatic subject occurs in initial position is fully consonant with the other facts we have noted about sentence-initial constituents, and with a simple fronting rule that can be applied to the basic order (OVS) to produce the only other order to occur with any frequency (SOV). These facts, and especially the conditioning factors relating to the fronting rule, need to be tested against a much larger body of data, preferably in nonelicited natural discourse context. It would be particularly useful to have texts from

less 'acculturated' groups of Makushi, and especially from women, who traditionally participate less in trading and other contacts with speakers of European languages.

1.4 Hianacoto-Umaua

Hianacoto-Umaua is a member of the Southeastern Colombia Carib group in Durbin's classification, and represents a Carib subgroup who migrated south-eastward from the Guiana area perhaps three or four thousand years ago (Durbin 1977). Durbin and Seijas (1973:22) cite references from the demographic literature to the existence of a small community of speakers still living in the vicinity of the Yari, Apaporis, and Vaupés rivers, but we have no linguistic data from any source other than Koch-Grünberg (1908). Fortunately, Koch-Grünberg's work is careful, detailed, and very explicit on matters of syntax. Koch-Grünberg states on p. 958: 'Das Akkusativ - Objekt wird gewöhnlich an die Spitze des einfachen Satzes gestellt' [The direct object is generally placed at the head of the simple sentence]. He then gives eighteen examples of simple object-initial sentences and phrases, among them the following:[4]

(5) a. tṹna kaɻã́ma-uanaɻ̨ (d)yĩ́(d)ya
water give neg he
He gives me no water.

b. tẽ̲nyĩ́ɻ̨e̲kẹ maǰihuɻi nẹhënẹhẹ dotṍɻo
one tapir killed doctor

The doctor killed a tapir.

c. ikṹja e̲hṍɻi - uanaɻ̨ kaɻihṍna
fish caught neg people
The people haven't caught any fish.

d. ṹmẹ kaɻihṍna hënẹhẹ ẹɻã́kudx̨a
many people killed Colombians
The Colombians killed many people.

The examples in (5) show typical Carib OVS syntax. Negatives are suffixed to lexical verbs, as in Hixkaryana (though there appears to be no use of a copular auxiliary; compare (5a, c) with (1b)). The form tṹna *water* will be recognized from (4c), and occurs in several other Carib languages as well. Evidently the Hianacoto-Umaua had enough contact with European colonists and travellers to have borrowed a word like dotṍɻo *doctor*, and to have a term for the non-Indian Colombians that they met (ẹɻã́kudx̨a).

Hianacoto-Umaua is often mentioned in the literature in conjunction with Guaque, which seems now to be extinct (Durbin and Seijas 1973:22). The two languages were apparently quite closely related, and probably mutually intelligible. Another language of the Southeastern Colombia Carib grouping on which we have no linguistic data is Carijona, of which a small population

of speakers survives (see Schindler 1977 for a recent anthropolgocial study). Carijona is closely related to Guaque, and to Hianacoto-Umaua. Notice that the name 'Carijona' is virtually the same as the word kaḷihõna *people* in Hianacoto-Umaua seen in (5d) above.

It may be that further work can still be done in the field on Hianacoto-Umaua, and on Carijona (which may or may not turn out to have similar word order). We hope it can and will be done. But until it is, the admirable work of Koch-Grünberg has to be trusted for the facts of Hianacoto-Umaua syntax, and on that basis, Hianacoto-Umaua must be recorded as an OVS language.

1.5 Arekuna/Taulipang

We follow Koch-Grünberg in regarding Arekuna and Taulipang as one and the same language (Williams 1932:4). The term 'Pemon', used by Armellada (1943-4) and others to refer to this language, appears to be a general word for 'people', used by native speakers of the language to refer to themselves (a variant form, 'Pemong' is common in the literature). Edwards (1977) notes that Akawaio is also included in Armellada's 'lengua Pemon', linked with Arekuna as the Roraima subgroup of Pemon (p. 6); Edwards seems to regard Akawaio and Arekuna as distinct, although 'closely related and generally mutually intelligible' (p. 2); we have not included Akawaio as a possible object-initial language, since the few relevant examples we find in Edwards (our only source) point to its being consistently SOV. Durbin's classification places Pemong (Taulipang), Akawaio and Makushi all in the same subgroup of the East-West Guiana branch of Northern Carib. Edwards estimates over 500 Arekuna in Guyana, and says that they are 'a small group of the large Arekuna tribe of Venezuela' (pp. 4,6). Other population estimates are confusing: Basso (1977.10) gives 2,600-7,000 for Pemong, but includes in this group Makushi and Kamaracoto, as well as Arekuna; Abbott and Hodsdon, on the other hand, give much larger estimates for Makushi alone (see 1.3).

Our sources of information about word order in Arekuna/Taulipang are Koch-Grünberg (1924, 1928), Armellada (1943), and Edwards (1977). An apparently explicit statement that on closer examination seems somewhat less than clear comes from Armellada (1943.220), in a section headed Observaciones sobre la oración simple ('Observations on the simple sentence'):

> La construcción en el idioma Pemón es generalmente a la inversa, descendente o figurada, es decir, aquella, cuyo orden es el siguiente: término circunstancial, término directo, verbo y sujeto. Esto puede comprobarse con cualquier frase escogida al azar.
>
> [The construction in the Pemon language is generally inverted, descending or figured (?), that is to say, that whose order is the following: circumstantial term, direct term, verb and subject. This can be verified with any sentence chosen at random.]

Armellada supplies two glossed examples at this point, but gives a free translation only for the first:

se-te pai yei mayi-te nak-kere kuima-da neke sane
este lugar desde, árbol aquel hasta limpio no ciertamente
por ciertamente no limpio desde este lugar hasta aquel árbol.

[this place from, tree that as-far-as clean not certainly
certainly not clean from this place as far as that tree.]

aten-te nak au-te-kon, konok-pe tise-re?
cual lugar a, vos-vais-otros, lluvia como (lluvioso) estando?
[what place to, you-go-others (i.e. you-go-collective-DCD/GKP)
rain as (rainy) being?]

Plainly, Armellada's examples do not make clear the intent of his statement, with its rather curious reference to "inverted, descending or figured" construction. He seems to be asserting that an order like Locative-Object-Verb-Subject would be typical, but he does not illustrate this adequately.

Fortunately, other sources clarify matters somewhat. Koch-Grünberg, whose field work dates back to the first decade of the century, states that in transitive sentences the normal position for subject is after the verb when it is a free form pronoun (OVS), and sentence-initial when it is any other kind of nominal (SOV), and that in both cases subjects are marked by the suffix -ʒa (1928.173). The great majority of the sentences in the texts which he gives (1924.155-255; 1928.189-233) confirm this, but there are exceptions, when either a pronoun subject occurs sentence-initial or when a (nonpronoun) nominal subject occurs after the verb; one exception is (1924.155):

(6) Auaíleg ẹ́na(x)pẹ ẹ́kú Konewó-ʒa
Tucumá Nuβ aβ Konewó
Konewo aβ eine Tucuma-Nuβ [*Konewo ate a tucuma nut.*]

Koch-Grünberg calls the suffix -ʒa a 'passive' marker (1928.173), which we equate with the ergative marking found in closely-related Makushi (see 1.3). Edwards gives more specific information about this suffix in Arekuna that identifies it even more closely with the Makushi suffix (p. 44):

> The nominal in a non-progressive transitive sentence which is the 'doer' of the action is marked by the suffix ya ... Personal pronouns performing the function of subject in transitive sentences are also marked by the suffix ya. In cases where the subject pronoun is optionally not expressed (1st person singular) the ya is attached to the verb form which has the subject in the underlying structure.

Edwards shows elsewhere that the expression of progressive aspect requires a copula-complement type of construction (pp. 39-40), so in view of the Makushi evidence it is not surprising that the subject in such sentences is not marked by the suffix -ya; in Makushi such copular sentences are

more like intransitives in their word order patterning and the absence of the subject marking suffix (see 1.3).

Edwards is more cautious in his statements about word order in Arekuna, saying only that it is freer than in English, and he refers to the function markers which 'help in showing the relationships among parts of the sentence'(p. 45). He adds that 'the verb can and very frequently does occur as the final element in the sentence'. He gives one example of SOV ((7a) below), and there are two or three others in the short text (pp. 50-1); there are no OVS sentences in the text, but in his list of useful expressions the only examples we found of simple delarative transitive sentences are both OVS (pp. 95-6), the first ((7b) below) with a (nonpronoun) nominal subject, and the other (7c) with a pronoun subject:

(7) a. peero-ya nong akapö
dog SM earth dug
The dog dug the earth.

b. yeei yeepeeruu tongkee mĭrèetong ya tiicha reepakpô
tree fruit gave child-PLUR SM teacher (?)
The pupils gave the teacher some fruits.

c. moorok yamök tuumĭ tokya mö
fish PLUR poison they-SM FUT(?)
They will poison fish.

There is less information available to us at present for Arekuna/ Taulipang than for Makushi, but what there is suggests that we are dealing with either an OVS language or a language vacillating between SOV and OVS, very much as described above for Makushi. There is the encouraging prospect that for both these languages (and for some others in the Carib family) it will soon be possible to arrive at more definitive conclusions, as a result of the ongoing Amerindian Languages Project directed by Walter Edwards.

1.6 Panare

The Panare tribe live in a region to the south of Caicara on the Orinoco river in Bolivar state, Venezuela. The Panare language is classified by Durbin as Northern Carib (Western Guiana), closely related to Mapoyo and Yabarana (for which we know of no materials containing syntactic information).

The only source we have been able to find concerning the syntax of Panare is Cauty (1974). Cauty is as specific as anyone could wish regard-in the order of constituents in the sentence where ambiguity is not prevented inflectionally. We quote from his section headed 'El orden de las palabras'(pp. 41-42):

Cuando la función gramatical no se expresa por medio de un sufijo flexional, el orden de las palabras es importante. Por

exemplo, las funciones de sujeto y de objeto (directo), así como la mayoría de las formas de determinación se expresan sin sufijo, por medio de la importancia que tenga el orden de las palabras en la oración. El orden más común de la oración simple es el siguiente: Objeto, Verbo, Sujeto.

[When grammatical function is not expressed by means of an inflectional suffix, the order of words is important. For example, the functions of subject and (direct) object, like the majority of forms of determination are expressed without a suffix, by means of the importance that the order of words has in speech. The most common order in simple speech is the following: Object, Verb, Subject.]

Cauty then provides the data given in (8).

(8) a. pi? kokampö? unkĭ?
child washes woman
The woman washes the child.

unki? kokampö pi?
woman washes child
The child washes the woman.

Cauty adds the interesting observation that the most cohesive unit ('el nexo más firme') in the OVS sequence is VS. (In Hixkaryana, as noted in section 1.1, it is unquestionably the OV sequence that comes closest to being syntactically inseparable.) Cauty's claim runs counter to the familiar traditional view that object and verb always form a unit (the VP or Predicate) to which the subject does not belong.[5] Illustrating his point (though not, we feel, in any compelling way), Cauty cites the possibility of postposing the object past the verb-subject unit, affixing the prefix yi- to the verb:

(9) a. marankayo römu: mane yu
orange wash Future[6] I

b. yirömu: mane yu marankayo
yi-wash Future I orange
I am going to wash the orange.

Conceivably this is, as Cauty suggests, evidence that the VS nexus is fairly tight and non-interruptible. More interesting for our puposes, (9b) suggests that VSO is a marked order in Panare, with the prefix yi- indicating that the object has been right dislocated; this supports the claim that (9a) represents a more basic order of constituents.

From Cauty's account, then, we must take Panare to be an OVS language with VSO as one of its permitted nonbasic alternant orders.

1.7 Bacairí

Bacairí (Bakaïri) is another language of the Carib family, but is located a long way south of the postulated Carib homeland in the Guianas. The Bacairí live in the Xingu basin, 600 miles south of the Amazon. There are approximately 250 of them. Their language is placed by Durbin with Nahukwa in Southern Carib (Xingu Basin). On Nahukwa, which includes Kuikuru and Kalapalo, there is ethnographic data (see references by E. B. Basso, R. L. Carneiro, and G. E. Dole in the Introduction to Basso, ed., 1977) but there is no linguistic material known to us.

According to Wheatley (1973:110), Bacairí has OVS order as basic in transitive clauses:

> The order of Bacairí clauses with unmarked theme is generally subject-predicate for intransitives, object-predicate-(subject) for transitives, and item-complement for statives: udodo idale 'jaguar (theme) goes (subject-predicate, intransitive, subject as unmarked theme)', anguela aieniemba gala maura 'I don't create anyone (theme) (object-predicate-subject, transitive, object as unmarked them)', xina taroiri necaunada 'we harvested our own rice (subject-object-predicate, transitive, subject as unmarked theme)', piaji maca''he is a shaman (item-complement, stative, complement as unmarked theme)'.

There is much that is unclear to us about what Wheatley means by his terminology ('theme', 'thematic/athematic', 'focal', 'unmarked'), and even the morpheme glossing of the data in his article is not given but has to be deduced by the reader through a process of comparison and deduction. But we find at least the following additional examples:

(10) a. taroiri nodoque maca
his rice left he/thematic/focal
He left his rice.

agueuane modo neuan para maunca
speaker collective believe neg he/athematic/focal
He does not believe the speakers.

However, earlier work on Bacairí disagrees with the statement Wheatley makes. Von den Steinen (1892) makes no general claim about word order, but in the texts he gives, for every OVS clause there are two OSV, two or three SVO, and five SOV clauses. De Abreu (1895) confirms the impression one might gather from this, stating that Bacairi normally has SOV order, other possibilities being permitted "quando logicamente não existe confusão possivel" ('when logically there exists no possible confusion'). He gives examples of OVS, SVO, and SOV form, and a 53-sentence text. In the text there are only seven clauses where both subject and object are full NPs. Of these, three are SOV and four are OSV, two of the OSV ones being sentences in which the O is a direct quote.

None of this makes it entirely clear which order of constituents should be thought of as basic for Bacairí. In view of the membership of Bacairí in the Carib family, however, we feel that Wheatley's statement should not be overlooked. Bacairí is either an OVS language, or, like Makushi and Arekuna/Taulipang, at least exhibits in its syntax enough tendencies toward OVS order to illustrate one way in which OVS basic order might arise diachronically from earlier SOV (cf. section 3 below).

1.8 Asurinî

Asurinî is the only OVS language known to us that does not belong to the Carib family. Like OSV Urubú (see 2.3), it is a Tupian language. It is spoken in the region of the lower Tocantins river, south-west of Belém and not far from the mouth of the Amazon. There are probably less than 100 speakers left today.

Our sources are Harrison (1970, 1976) and Solly (1964, 1965). We are indebted both to Carl Harrison and Robin Solly for their help and cooperation. There are very few examples of actual sentences of the language in Harrison's work, but it does include (11a); (11b) and (11c) are taken from the more abundant supply of data in Solly (1964):

(11) a. Cánee cenerecáŋta á?ee
us 3S1O-see-future he
He will see us.

b. Kanoa oeraha kacowaŋawa-ŋoa pane kacoheri pe
canoe 3S-took Kaju's men sadly rapids to
Unfortunately, Kaju's men took the canoe to the rapids.

c. Cerewi?a oeraha kamara-piciŋa tokorohi pe
Cerewia 3S-took Kamara-Picinga Tucurui to
Kamara-Picinga took Cerewia to Tucurui.

Harrison (1970.6) distinguishes two dominant word order patterns, corresponding to two different groups of Asurinî speakers (which he refers to as group A and group B):

> ... the Portugese phrase order
> subject- - transitive verb - object
> seems to be having some effect on Asurinî phrase order. Speakers of group B, with less contact [with Portugese speakers], show a more pronounced preference for the order
> object - transitive verb - subject,
> at least in the lead sentences of discourses.

These two orders, SVO and OVS, occur most often, and with about equal frequency, in the much larger sampling of language data that Solly (1964) provides. OVS is more frequent text-initially than SVO, and in most of the SVO examples it appears that the subject occurs in the initial position to mark some kind of special discourse prominence, such as contrastive focus,

emphasis, topic-highlighting (Solly 1965.6, 30). This marked order is often reinforced by the addition of one of a small set of particle-like morphemes, which signify some kind of emphasis (cf. Solly 1965.52). The two other orders which occasionally occur, SOV and OSV, also seem to be at least partially accounted for by such a fronting hypothesis (in the case of OSV it is the object which receives emphasis). There is verb agreement with the person of both subject and object in transitive clauses (Solly 1965.38,46); this accounts for the many clauses in the texts which do not have subject and object nominals (cf. the Carib OVS languages discussed earlier in this section).

Harrison's observations concerning the two distinct groups of Asuriní speakers strongly suggest that OVS is the basic word order in Asuriní, with Portuguese influence accounting for the increasing frequency of SVO. Solly's notes, and his data, supply the additional evidence that, independently of the pressure from Portugese, SVO, and to a lesser extent SOV, occur as marked orders for the purpose of highlighting the subject constituent.

2. OSV languages

In this section we shall give a brief discussion of four languages of Brazil: Apurinã (section 2.1), Urubú (2.2), Nadëb (2.3), and Xavante (2.4). To begin with, however, we shall comment on those non-Brazilian languages known to us for which OSV has been claimed or hinted to be the descriptively basic order.

About Dyirbal, Hurrian, Greenlandic Eskimo, and Aleut, we shall add nothing to what is said in Pullum (1977.259-265).[7] None of them could be regarded as clear cases of object-inital basic word order, and all of them have ergative NP morphology, which raises the difficulty of deciding whether the word order principles are sensitive to the subject/object distinction or the ergative/absolutive one, and of how the question of object-initiality is to be reformulated if the latter is the case. None of the languages discussed in the following sections have ergative NP morphology, so the question of whether the terms 'subject' and 'object' are being correctly applied to them should not be difficult to answer.

Occasional references to alleged OSV languages continue to appear in the literature from time to time. Steele (1977a.556) cites Huichol (Uto-Aztecan) as OSV through a fairly understandable error in interpreting Grimes (1964). Grimes, unconcerned with questions of constituent order, happened to choose (p. 48) two object-initial sentences to illustrate transitive clauses. The sentences read, literally, 'Us, the chanters speak-to' (OSV) and 'Those wolves, associate-with you humans'(OVS). He also notes (p. 69) that OSV is a commoner order than SOV. But, of course, OSV is commoner than SOV in English too (That I like versus *I that like). Everything in Grimes (1964) is compatible with Huichol being an SVO language; and in Grimes (1975.172, fn. 7) we find it confirmed that SVO order "represents normal or unmarked thematization, with agent as subject coming first". The two illustrative transitive clauses cited in the earlier work are unrepresentative in this regard.

By a coincidence, Steele appears to claim OSV order as basic for another Uto-Aztecan language, Luiseño, in another paper of the same year (1977b:604). But here, OSV is just a printer's error for SOV, as shown by all the examples in the paper, and the list of SOV languages in Steele (1975.208).[8]

Neil Smith has pointed out to us the remarks of Bright and Bright (1965.256) concerning the Athabaskan language of Smith River California: "Smith River ... has rigid syntactic ordering ... the basic sentence order is Indirect Object, Direct Object, Subject, Verb, and none other." The evidence for this statement cannot now be checked with the linguist who did the original research on Smith River, which is also known as Tolowa. It was carried out by the late Jane Bright, and some of her files and notes seem to have been mislaid (William Bright, p.c.). But with the kind help of William Bright and Victor Golla we obtained a Tolowa text. It in no way bears out the OSV claim. The untitled text, elicited by showing the informant various stick-figure picures, is certainly not adequate as a sample for syntactic study, but it does serve to falsify the claim that Tolowa only permits verb-final sentences with objects before subject. There are instances of postverbal objects and instances of SOV (or SXV) clauses, but no sign of OSV (or IO-O-S-V) at all. Golla (p.c.) notes that although Jane Bright could perhaps have found in later work that the text in question was aberrant, the structure of adjacent and closely related languages such as Hupa and Tututni makes this quite unlikely. Golla also makes the very pertinent observation that the normal order of agreement prefixes on Athabaskan verbs is IO-O-S-V. Conceivably a misunderstanding about whether order of morphemes in the verbal unit or order of full NPs in the sentence was under consideration could have led to the misleading statement in Bright and Bright (1965). Whether or not this is the case, it seems at present that there is no extant evidence for saying that Tolowa is an OSV language. It would, in fact, be remarkable to find it had <u>any</u> fixed order for sentence constituents, since Bright and Bright (loc. cit.) state that "Smith River morphology ... shows many obligatory categories: verb forms have up to 11 prefix positions, marking person, number, tense, and aspect; nouns have possessive prefixes which indicate both person and number." A language with rich morphology like this that also has rigid word order in the sentence is all but unheard of.

Finally, Ruhlen (1977.152) cites Mamvu, a Central Sudanic language, as having OSV basic order. His source, he has kindly informed us, was Tucker and Bryan (1965.55), where it is stated that in Mamvu "it is usual to place the object first", with OSV as the order in Definite aspect sentences, and OVS with Indefinite aspect, postpositions and auxiliaries being sentence-final in each case. A closer look at Tucker and Bryan suggests that they offer no relevant evidence to support their statement. We find no cases of full NP subjects in their examples of word order in Mamvu transitive clauses. In most examples there is no subject at all, the element glossed as subject and marked "S" being a verbal agreement prefix m- 'first person singular'; the free form pronoun for the first

person singular is umú (p. 41), but it does not appear in the examples with which they illustrate word order on pp. 46, 47, 48, 53. Their alleged OSV sentences (as on p. 48) are in fact superficially OV, where the verb bears a subject-agreement affix (e.g. ura m-ɔ́nù *meat I-eat*), and their alleged OVS~Aux sentences are OV_1V_2, where V_2 is an auxiliary verb bearing a subject agreement prefix (e.g. ura ɔnù mú-tà *meat eat I shall*). On the basis of examples like these, Tucker and Bryan state (p. 46) that "the word order O+S+V is preferable to S+V+O", but even so, they add that "this variation, however, seems to be a matter of emphasis". And turning to the only source known to us for the direct study of Mamvu word order from texts, namely Vorbichler (1969/1970), we find it seems clear enough that Mamvu is in fact basically subject-initial (SVO or SOV).[9] The facts quoted above from Tucker and Bryan's study are entirely compatible with this conclusion, if we simply assume that nonemphatic subject pronouns may be omitted. We reject, therefore, the unsupported claim Tucker and Bryan appear to be making, and which Ruhlen picks up, to the effect that Mamvu has dominant OSV order.

We know of eight languages, then, that one might take to be OSV if one relied uncritically on assertions in the literature without reexamining the primary data. In all these eight cases the attribution proves to be mistaken. Only in one instance have we encountered facts about a language from outside South America for which an object-initial classification could yet turn out to be tenable. These concern Haida, an unaffiliated language spoken in the Queen Charlotte Islands off western Canada and in the southernmost extension of Alaska. Our information on Haida comes from recent work by Carol Eastman and Elizabeth Edwards at the University of Washington. In the papers we have had access to, they scrupulously avoid making a claim either that Haida is OSV or that it is not, preferring rather to argue that surface orders in Haida can all be explained by reference to a "topicalization" process which determines sentence-initial position for a "topic" constituent, regardless of what the basic order is assumed to be, or even whether there is one. However, a number of features of Haida syntax suggest that OSV could be the descriptively basic order, and a number of remarks by Eastman and Edwards in their papers suggests that they recognize this. To the extent that they cast aspersions on the idea of an OSV basic order, their remarks do not seem wholly consistent. We shall not discuss the Haida facts here, however, but defer the matter until the work of Eastman and Edwards is available in published form. Suffice it to say that if Haida is <u>not</u> representable as a clear instance of basic OSV order, there are no known OSV languages anywhere outside the Brazilian Amazon area.

We turn now to a discussion of the four languages we know of that seem genuinely to be OSV.

2.1 Apurinã

Apurinã (Ipurinã) is a member of the Arawakan language family. There are currently about 1,000 speakers, scattered along 1,500 kilometers of the Purus river in the state of Amazonas in Brazil (Pickering, 1974a).

Our sources are two unpublished papers by Pickering (1974a, 1974b), which make clear statements, supported by data, that provide strong evidence that OSV is the basic order in Apurinã. (Our attention was drawn to Pickering's work by a brief reference in Longacre 1976.273.) Examples (12a-f) are from the 1974a paper, and (12g-h) from 1974b):

(12) a. anana nota apa [OSV]
pineapple I fetch

b. anana n-apa [OV]
pineapple I-fetch

c. anana n-apa nota [OVS]
pineapple I-fetch I

d. nota apa - ry anana [SVO]
I fetch it pineapple

e. n-apa - ry anana [VO]
I fetch it pineapple

f. n-apa -ry anana nota [VOS]
I fetch it pineapple I
I fetch pineapple.

g. kimi Pedro na - nika [OSV]
corn Pedro NEG ate
Pedro didn't eat corn.

h. anana nota syka-i (pite) [OSV]
pineapple I give you (you)
I give you pineapple.

This set of examples illustrates all the relevant considerations with respect to constituent order, as noted by Pickering (1974b.3-5). Pickering states: "The only surface order that has no bound pronouns is OSV." This can be seen by comparing (12a,g) with (12b,c,d,e,f). He continues: "Of special interest is the surface order for di-transitive sentences, OSV-o, which is obligatory ... the two objects [O = free form nominal, o = bound form - DCD/GKP] are not coreferential -- the bound object pronoun (and the optionally following coreferential free form) represents the indirect object. Thus, the di-transitive structure furnishes strong evidence that OSV is the basic order." For examples, see (12g,h). Pickering also says: "If both free forms either precede or follow V their orders ... might "-- (this is seen in (12a, f, g, h)); "Surface order ... might be said to support VOS [and]

OVS, but the fact that the Subject (in some form) almost invariably precedes V argues against these possibilities [and] there is no motivation for positing them"; and, summarizing: "Both motivation and evidence point to OSV [as the basic order]".

We should perhaps note that Pickering, in a personal communication, indicates that he is now of the opinion that there is no single "underlying" configuration of constituents in Apurinã, but that the order "is dictated by discourse factors". He appears to mean by this that each discourse genre has its own preferred order of constituents (with the possibility also of other marked orders occurring in each different genre). We have not seen any evidence that would support such a 'multiple basic orders' hypothesis for this or any other language; indeed, the facts and data which Pickering reports, as outlined above, appear to us to constitute a strong confirmation of a single basic order, and that OSV, for Apurinã.

2.2 Urubú

The Urubú language belongs to the Tupí family. There are about 500 speakers in the Northeast region of Brazil. Our only source of information is Kakumasu (1976), and this makes a clear statement concerning word order (p. 171):

> A presente análise se baseia no modelo gerativo-transformacional ... Trata exclusivamente da sintaxe "predileta" da língua Urubú, ou seja OSV.
>
> [The present analysis is based on the generative-transformational model ... It treats exclusively the "preferred" syntax of the Urubú language, that is OSV.][10]

In a footnote the following statement is also made (p. 195):

> No caso das outras disposições, parece haver menos frequencia de uso e nenhuma mudança de significado. Devem ocorrer as seguintes: SOV, VS, VO. Estas podem ser derivadas através de transformações da disposição 'predileta', OSV.
>
> [In the case of other orderings, there appears to be less frequent usage and no change of meaning. The following can occur: SOV, VS, VO. These can be derived by means of transformations from the 'preferred' order, OSV.]

In accordance with his declared intention to restrict the description to the syntax of the preferred order, Kakumasu cites only transitive sentences with the OSV order, from which the following are taken (with our English translations of his Portuguese glosses):

(13) a. jakare- ke Kaitã japi u'am
alligator-focus Kaitã he shot with shotgun he was
Kaitã was shooting an alligator with the shotgun.

b. jape'a-ke jande jamondok jaho
wood- focus we we cut we went
We went to cut wood.

c. pako xuã u'u
banana João he ate
John ate bananas.

d. koĩ sepetu-pe jurukã Nexĩ mãi muji-ta
tomorrow spit- on ribs Nexĩ mother she will roast
Nexĩ's mother will roast the ribs on the spit tomorrow.

The precise function of the 'focus' marker -ke is not clear to us. According to Kakumasu (p. 186), it occurs only with the object nominal in transitive clauses, but it is not obligatory (cf. exs. 13a, b) and (13c,d). It can also occur with the subject in intransitive clauses (and possibly in transitive clauses if there is no object nominal), and with the nominal in a postpositional phrase, apparently in any type of clause. After asserting that it is not an object marker, Kaumasu goes on to say that it can be used to resolve possible amiguities as to whether a given nominal is subject or object; this presumably means that the marker occurs in both OSV and SOV clauses, and suggests that one of its functions is, in fact, that of object marker. Neither subject nor object nominals are obligatory, although only the subject appears to be marked in the verb (p. 175).

Kakumasu attaches significance to the verb-final aspect of the linear sequence as explaining the occurrence of SOV as the principal variant of the dominant OSV order (pp. 171-2). The relative order of S and O is considered of relatively minor importance, and he concludes that the syntax of Urubú is basically that of an SOV language (but see Derbyshire, 1979b.197 for some aspects of Kakumasu's treatment that are inconsistent with his conclusion at this point).

From Kakumasu's account we must conclude that Urubú is clearly a language with dominant OSV ordering, and that this is probably also the "basic order" in the sense in which we are using that notion. Our only reservation arising out of Kakumasu's description relates to the necessity for a clearer understanding of the function of the "focus" or "object" marker.

2.3 Nadëb

Nadëb is generally listed with the Macuan sub-family of Puinavean, though field workers deny that this is a proven affiliation. Today, there are about 200 speakers, located on or near tributaries of the river Negro to the northwest of Manaus, in northern Brazil.

So far as we know, nothing has been published on Nadëb syntax, and our information comes by way of personal communications from Helen Weir, who has done some preliminary field work on the language. She tells us that the two most frequently occurring orders are OSV and OVS (with the proviso common to all the languages discussed in this paper, that many sentences do not have full nominal subjects and objects as a result of the verb agreement patterns). Her current hypothesis is that "the preferred word order is OSV". The data which she supplies include the following simple transitive clauses, all of them OSV except (14e), which is OVS:[11]

(14) a. txùùᵍŋ nūū qĭ qi-taaq
tapir head I gather
I'm going to gather "tapir-head" [name of a fruit].

b. yiyèq hùùy - hãq qĭ qawxìì biq-sõõys
there forest in me snake nearly bit
There in the forest a snake nearly bit me.

c. samŭŭy yi qa-wùh
howler-monkey people eat
People eat howler monkeys.

d. boᵍŋ maqyoqyool qi-wùh
horse-fly [insect name] eat
The "maqyoqyool" eats horse-flies.

e. boᵍŋ tiq-wùh maqyoqyool - hãq
horse-fly it eat [insect name] CLARIFICATION MARKER
The "maqyoqyool" eats horse-flies.

Where S follows V, as in (14e) (and also in the less common orders VSO and VOS), it usually has following it the clitic-like morpheme -hãq, which signals that the full noun phrase is added to clarify the referent of the pronoun in the verb. This pronoun (tiq- in (14e)) is obligatory whenever the subject follows the verb. The combination of this pronominal element in the verb and the clarifier morpheme following the subject is fairly strong evidence that all three orders in which S follows V are marked orders. The other possible order is SVO, but this is less common, and Weir surmises that this is another case of a full noun phrase (here the object) being added after the main predication for clarification purposes (the evidence for this is not so strong as in the case of the subject NP, however, since the realization, if any, of the object person marker in the verb is often zero; the clitic -hàq does, however, often follow the object NP when it is in this postverbal position, just as it does with subject NPs).

Weir feels that more work needs to be done before she can arrive at a definitive conclusion about basic word order. The evidence, therefore, is not yet nearly as strong as it is for Apurinã or Urubú, but what she has reported to date clearly points to OSV as the most likely basic order of constituents.

2.4 Xavante

Xavante belongs to the Gê family, and is spoken by approximately 2,000 people, located in several scattered villages in the Northeastern part of the state of Mato Grosso in Brazil. In at least one of these locations they have close contact with a group of Bacairí.

Our first source of data on Xavante was Burgess (1976), which is directed to showing that the order of constituents in Xavante is determined by pragmatic considerations revolving around "information structure" and "topical structure". Burgess affirms that there is no basic word order in terms of the grammatical relations of subject and object (p. 3):

> When both subject and object are identified by noun phrases, there is no overt distinction as to which is which either by affixation or by word order. If one noun phrase refers to an animate object and the other to an inanimate, the animate one is usually the subject, and the inanimate the object. If both are animate, or both inanimate, only context will disambiguate them. Their order relative to each other is determined by information or topical structure and not by surface structure.
>
> The verb is most frequently the final element in the clause ... It is rare to find the verb as the first constituent of the clause unless it is the only constituent.

Notwithstanding Burgess's statement to the effect that there is no basic order of constituents, her data shows a strong preference for OSV. There is only one main clause with two noun phrases, a text-initial sentence with the NPs in OS order, (15a) -- though note that there is additionally a resumptive subject pronoun, and an object agreement affix on the verb. Pronouns like mate in (15a) are an almost obligatory feature of Xavante sentence structure. Otherwise, the transitive clauses in Burgess (1976) have only pronominal subjects. For what it is worth, the order that shows up in most cases is still OSV, as shown by (15b-d).

(15) a. Toptö wahi mate ti- tsa
Toptõ snake it her-bite
A snake bit Toptö.

b. aro tê tsub- dza'ra
rice they winnow PLURAL
They are winnowing rice.

c. ubure dza têtê a'â rom-dzuri
everything FUT they there thing-plant
They will plant everything.

d. upa dzama dza têtê dzuri
manioc also FUT they plant
They will also plant manioc.

There are two examples of SOV, where S is pronominal. There is a single occurrence of the order SVO in a main clause, but in this case the O is a right-dislocated noun phrase containing a clitic-particle, one of whose functions is that of CLARIFIER (its form -hã is similar to that which occurs in Nadëb with the same function --see 2.2); this postverbal noun phrase clarifies the referent of the third person prefix in the verb.

In dependent transitive clauses the same three orders are found (OSV, SOV, and SVO), and here OSV seems to be even more predominant, including one example (16a) containing two full noun phrases:

(16) a. Ĩ- to datê ta- ma 'wa'ri- dâ, ...
her-eye someone her-for operate- in order to, ...
... in order for someone to operate on her eye.

b. ..., wêdê têtê pahöri-mono-da
..., trees they cut- PURPOSE
..., to cut down the trees.

c. powawẽ têtê 'rê 'madö'ö-mono-da
cattle he CONT watch- PURPOSE
in order to look after the cattle

The data in McLeod and Mitchell (1977) generally supports the predominance of OSV, but here all the examples of transitive clauses seem to be ones with pronominal subjects. McLeod (personal communication) has supplied data from four texts in support of her intuition that, if there is any single basic order, it is OSV (she has a fluent knowledge of Xavante resulting from several years of field work including a considerable amount of translation work with native speakers). The data include the following clauses with subject and object noun phrases:

(17) a. tavamhã 'ridi hã, ma-tô pi'ö hã siwi 'masã
then locust EMPH, 3S-COMPL woman EMPH self-among some-spot
Then the women spot the locusts.

b. wêtê'rãti te we pi'õ 'wasa
[fruit-name] 3S this-way woman carry
The women are bringing home fruit.

c. e u'ã hã ĩna têtê 're predum ja'ra
QUERY turtle it-is its-mother 3S CONT raise PLUR
Does the mother bring up the turtles?

d. u'ã hã ĩna hã ãwa 're sapa'a ja'ra mono
turtle it-is its-mother it-is at(-it) CONT stay PLUR CONT

õ di
NEG STATIVE

The mother(s) do not stay with the turtles.

The data alone would lead us to a fairly strong tentative conclusion that the basic order of constituents in Xavante is OSV, which McLeod's intuitions would appear to support. We cannot, however, ignore the arguments Burgess presents for treating word order as being influenced to a considerable degree by pragmatic factors. There is clearly a need for a closer look at a larger amount of text material and further investigation of the clitic -hã, which, from McLeod's data, occurs in preverbal, as well as postverbal, phrases. (Burgess (p. 22) suggests that one of its functions is topic-marking, and summarizes other functions, described more fully in McLeod (1974), as "participant highlighting, marking change of agent, and as a device for building up suspense in a narrative"). Xavante must be regarded in the meantime as a likely OSV language, but perhaps not an established one.

3. Conclusions and prospects

It is hardly appropriate to draw conclusions from the very limited amount of work we have reported on in this paper. We have scarcely done more as yet than to point out that languages with OVS and OSV as their typical clause patterns do exist, and to map out an area within which we hope and intend that further work will be done. Nevertheless, we feel it is appropriate to mention here a few points that might be kept in mind as further work is done on object-initial languages.

One interesting question is where object-initial languages come from diachronically. We know too little about OSV languages to say anything about this, but a hypothesis suggests itself concerning a possible origin for OVS languages. As observed in footnote 2, seven of the eight languages discussed in section 1 are of the Carib family. That family contains today several languages with SOV basic order (for example, Galibi, known as Carib, and Waiwai, closely related to Hixkaryana and in sporadic contact with it). Thus there are OVS languages in a family that could originally have been SOV (notice that the reconstruction of original settlement and migration patterns in Durbin 1977 suggests that a number of the OVS Carib languages are breakaway groups from an original Carib concentration in the Guianas). Consider in this connection the remarks of Schwartz (1971. 160) concerning an alleged asymmetry between verb-initial and verb-final language types:

> VSO [languages] are almost always prepositional; SOV are almost always postpositional. VSO almost always have the relative clause after the head noun; SOV almost always have the clause before the head noun. And so on. But in the midst of this appealing symmetry, there is an element of discord: VSO languages almost always allow an SVO alternative; but "true" SOV languages do not allow OVS.

Schwartz is appealing here to a notion of "true SOV" (as opposed to false SOV? garden variety SOV?) that we believe should be rejected. Schwartz's asymmetry does not exist: there <u>are</u> languages with SOV as basic constituent

order that sometimes postpose the subject NP to give OVS as an alternant possibility. Wichita is one example (discussed in Pullum 1977.268-9). And Galibi ('Carib') is another. If the Carib languages that have OVS as basic order are assumed to have gammaticalized a previously stylistic but frequently used option of subject postposing, a reasonably plausible scenario for the diachronic development of a class of OVS languages emerges. (This idea, due to B. J. Hoff, is discussed in more detail in Derbyshire 1979b, and see also Derbyshire's paper in this volume).

A second point that should be mentioned is the areal clustering of the languages discussed in this paper. As we have stated, there seems to be no clear evidence for the basicness of object-initial order in languages from other continents than South America. The known object-initial languages are in fact all spoken within a tightly circumscribed geographical region, essentially coextensive with the area that drains into the Amazon. A line drawn to include the Guiana highlands, Brazil as far east as Belém and as far south as Brasília, a slice of Southeastern Colombia, and Venezuela south of the Orinoco, would include the location of every object-initial language that we know of, living or extinct. Yet this is not demonstrably due to either genetic relatedness of the languages concerned, or contact between the speakers of the languages. The languages discussed above fall into five different families (Carib, Tupian, Arawakan, Gê, and whatever Nadëb belongs to), and are not even regarded as all falling within the same phylum (Apurinã and Nadëb are said to be within the 'Andean-Equatorial' phylum, the others within an alleged 'Gê-Pano-Carib' phylum). And despite the remarkable migrations up and down the rivers of Brazil that have occurred within recent historical times (see Hemming 1978), there is no evidence at all of contact between, say, the Panare and the Asuriní, or the Apurinã and the Urubú. A hypothesis of extended contact between such widely separated groups would be the idlest speculation. In general, the density of the vast tropical rain forest areas that Brazilian Indians inhabit guarantees that inter-group contacts could have little to do with convergent linguistic tendencies. And where there is contact, it does not by any means always ensure convergence; the Hixkaryana, for example, have long been in contact with the Waiwai, whose closely related Carib language is, as remarked above, still solidly SOV. If there is an areal tendency toward the object-initial pattern in the Amazon area (and there is of course only the slenderest evidence for this as yet), it is quite unclear what the explanation for it would be.

Finally, we note again the demographic aspect to this work that we remarked on in the introduction. Brazilian Indians were very numerous in 1500; some of their settlements along the Amazon were huge, as many travelers reported, and estimates of the total population of Brazil in 1500 are generally in the millions. (Hemming (1978) reviews the literature and the data, and decides on a population estimate, more conservative than some, of 2.43 million.) Yet today, when the population of the world as a whole has approximately multiplied by ten, there may be as few as 50,000 Brazilian Indians left alive. Among the dwindling population are some groups who have only very recently been contacted, and some, almost certainly, who still have not come into stable contact with outsiders of any description. There

FOOTNOTES

[1] Some of the many people to whom we owe thanks for the help they have given us are mentioned in the text. The assistance of Marshall Durbin, and the access he afforded us to his important collection of materials on Carib languages, was particularly valuable. Ms R. Blass, Professor J.A. Cummins, and Dr N.V. Smith helped us with certain points of translation. The work was supported by a grant from the Social Science Research Council (UK) to University College London under the title 'Investigations in the structure of an Object-Verb-Subject language: Hixkaryana'. A preliminary version of the paper was presented to the Summer Meeting of the Linguistic Society of America at Urbana, Illinois in July 1978.

[2] The first seven languages discussed are all of the Carib family. For an introductory guide to the literature on some of the most relevant languages of this family (those spoken in the Guiana area of Venezuela, Guyana, Surinam, and Brazil), see Derbyshire and Pullum (1979).

[3] See Pullum (1978) for slightly fuller discussion.

[4] Where we use ɻ in these examples, Koch-Grünberg uses a symbol composed of an l and an r superimposed, for which his articulatory description suggests an l-like retroflex roll or flap. Otherwise we reproduce his transcription, which he explains on pp. 89-90, except that we show the morpheme breaks in Verb+Negative forms, discussed by Koch-Grünberg on p. 981.

[5] This claim would have to be relaxed anyway to allow for VSO languages, of course; and OSV languages (part 2 of this paper) would apparently also have to lack a phrase-structure constituent consisting of verb and object alone.

[6] The gloss here is an assumption on our part.

[7] Cf. Pullum (1978) for an additional comment on Hurrian.

[8] Thanks to Susan Steele for confirming this point and the last.

[9] We are grateful to Neil Smith and Regina Blass for their help in working out from Vorbichler's texts, which are translated but not morpheme-glossed, what the commonest word orders are.

[10] Kakumasu's paper was written in English (forming part of a Master's thesis at the University of Hawaii) and was translated into Portuguese to be published. We give here a translation of our own from the Portuguese, since we have not had access to an English version of his work.

[11] The Nadëb data are in a working orthography which is neither definitive nor phonetically transparent; q, for example, is a glottal stop, and accents indicate different vowel qualities in a rather complex vowel system.

are few linguistic descriptions of any Brazilian indigenous languages (and the majority will never be described, since they are already extinct). We know of absolutely nothing, for example, on the languages of the Kren-Akorore or Panara (contacted in 1973, and reduced since then by about 50% to 63 in number through disease and societal trauma; probably of the Gê family like Xavante), or of the Suruí (recently contacted; reportedly Tupian like Asuriní and Urubú), or of the Waimiri-Atroarí (still not 'pacified' despite the construction of a highway through part of their former territory; Carib family). Any work whatever that is done on the langauges of these and similar peoples is likely to cast at least some light on questions of the prevalence of the object-initial type of basic sentence structure that is represented in the languages we have discussed in sections 1 and 2. If descriptive work on the remaining Brazilian Indian languages is not done while the short time available for it lasts, linguists will find themselves even closer than they are at present to the point of having insufficient diverse types of language represented in their sample, and being in consequence ill-equipped for determining which are the essential and which the accidental properties of human language.

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